We claim:

1. A method to perform cardiac surgery on a beating heart comprising:

making a xyphoid incision,

inserting an offsetting retractor into the xyphoid incision,

vertically offsetting at least a portion of the rib cage using the offsetting retractor,

introducing a beating heart stabilizer to contact the beating heart, and

performing a cardiac surgical procedure.

2. The method of claim 1 further comprising:

introducing an organ positioner into the xyphoid incision to engage an internal organ.

3. The method of claim 2 wherein the cardiac surgical procedure establishes a coronary artery by pass graft.

4. The method of claim 2 wherein the beating-heart stabilizer exerts a mechanical force to stabilize the beating heart proximate to the site of a target coronary artery.

5. The method of claim 1 wherein the beating-heart stabilizer uses suction to attach to the beating heart.

6. The method of claim 1 further comprising harvesting an internal mammary artery.

7. The method of claim 6 wherein the harvested internal mammary artery is used as a source artery for a coronary artery bypass graft.

8. Surgical apparatus for accessing the beating heart via a xyphoid incision comprising:

means for vertically offsetting a portion of the rib cage and

a beating-heart stabilizer.

9. The apparatus of claim 8 wherein the vertically offsetting means is a retractor having a lifting arm operably attached to a retractor frame.

10. The apparatus of claim 9 wherein the lifting arm has a locking mechanism to fix the position of the lifting arm in a vertically offset configuration.

11. The apparatus of claim 9 further comprising a retractor arm operably attached to the retractor frame.

12. The apparatus of claim 8 further comprising supporting arms attached to a retractor frame and having a plurality of contact points to engage a patient's body.